



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0049; Product Identifier 2017-CE-031-AD; Amendment 39-21222; AD 2020-18-01]

RIN 2120-AA64

Airworthiness Directives; Textron Aviation Inc. Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Textron Aviation Inc. (Textron) Model 172N, 172P, 172Q, 172RG, F172N, F172P, FR172K, R172K, 182E, 182F, 182G, 182H, 182J, 182K, 182L, 182M, 182N, 182P, 182Q, 182R, T182, F182P, F182Q, FR182, R182, TR182, 206, P206, P206A, P206B, P206C, P206D, P206E, TP206A, TP206B, TP206C, TP206D, TP206E, U206, U206A, U206B, U206C, U206D, U206E, U206F, U206G, TU206A, TU206B, TU206C, TU206D, TU206E, TU206F, TU206G, 207, 207A, T207, T207A, 210-5 (205), 210-5A (205A), 210B, 210C, 210D, 210E, 210F, and T210F airplanes. This AD was prompted by cracks found in the lower area of the forward cabin doorpost bulkhead. This AD requires repetitively inspecting the lower area of the forward cabin doorposts at the strut attach fitting for cracks and repairing any cracks. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Textron Aviation Inc., Textron Aviation Customer Service, One Cessna Blvd., Wichita, Kansas 67215; telephone: (316) 517-5800; email: customercare@txtav.com; internet: <https://support.cessna.com>. You may review this referenced service information at the FAA, Policy and Innovation Division, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148. It is also available on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0049.

Examining the AD Docket

You may examine the AD docket on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0049; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations (phone: 800-647-5527) is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Bobbie Kroetch, Aerospace Engineer, Wichita ACO Branch, 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: (316) 946-4155; fax: (316) 946-4107; email: bobbie.kroetch@faa.gov or Wichita-COS@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

The FAA issued a supplemental notice of proposed rulemaking (SNPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain serial-numbered Textron Aviation Inc. (Textron) (type certificate previously held by Cessna Aircraft Company) Model 172N, 172P, 172Q, 172RG, F172N, F172P, FR172K, R172K, 182E, 182F, 182G, 182H, 182J, 182K, 182L, 182M, 182N, 182P, 182Q, 182R, T182, F182P, F182Q, FR182, R182, TR182, 206, P206, P206A, P206B, P206C, P206D, P206E, TP206A, TP206B, TP206C, TP206D, TP206E, U206, U206A, U206B, U206C, U206D, U206E, U206F, U206G, TU206A, TU206B, TU206C, TU206D, TU206E, TU206F, TU206G, 207, 207A, T207, T207A, 210-5 (205), 210-5A (205A), 210B, 210C, 210D, 210E, 210F, and T210F airplanes. The SNPRM published in the Federal Register on May 29, 2020 (85 FR 32308).

The FAA preceded the SNPRM with a notice of proposed rulemaking (NPRM) that published in the *Federal Register* on February 1, 2018 (83 FR 4605). The NPRM was prompted by reports of cracks in the lower area of the forward cabin doorpost bulkhead on more than four dozen Textron 100 and 200 airplanes. The NPRM proposed to require repetitively inspecting the lower area of the forward cabin doorposts at the strut attach fitting for cracks and repairing any cracks found by modifying the area with the applicable service kit. The SNPRM proposed to modify the estimated costs of the

proposed AD, the repetitive inspection intervals, and the credit allowed for previous actions; clarify the inspection instructions for airplanes with the service kit installed; correct the contact information for obtaining the service information; and add a reporting requirement to collect the inspection results. The SNPRM also changed some of the model designations listed in the applicability in order to match the models as they are listed in the type certificate data sheet.

The FAA is issuing this AD to detect and address cracking of the wing strut attach point. The unsafe condition, if not addressed, could result in failure of the wing in operation, which could result in loss of control of the airplane.

Comments

The FAA gave the public the opportunity to participate in developing this final rule. The following presents the comments received on the SNPRM and the FAA's response to each comment.

Support for the SNPRM

Patrick Imperatrice expressed support for the proposed AD.

Request to Extend or Remove Calendar Compliance Time

Kermit Bunde expressed support for the 1,000-hour time-in-service (TIS) inspection interval but requested the FAA remove the 36-month calendar time inspection interval. The commenter stated that the 36-month interval is too often and that cracking is a function of usage and not only elapsed time. The commenter provided examples of Cessna maintenance actions that have no calendar time limit.

The FAA disagrees. Both the manufacturer's guidance, which is published in the supplemental inspection documents (SIDs) for certain airplanes, and fleet history support the 36-month interval for inspecting this location. Loading conditions outside of flight,

such as ground loads, handling loads, and tie down loads, may also cause cracking at this location. Therefore, the FAA determined the inspection interval of 36 calendar months or 1,000 hours TIS, whichever occurs first, is necessary to address the unsafe condition. The FAA did not change this AD based on this comment.

Conclusion

The FAA reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this final rule as proposed.

Related Service Information under 1 CFR Part 51

The FAA reviewed Cessna Single Engine Service Bulletin SEB93-5, Revision 2, dated May 29, 2019 (SEB93-5R2) and Cessna Single Engine Service Bulletin SEB95-19, dated December 29, 1995 (SEB95-19). For the applicable model airplanes, the service information contains procedures for repetitively inspecting the lower area of the forward cabin doorposts for cracks and repairing any cracks found by modifying the area with the applicable Cessna service kit.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Other Related Service Information

The FAA reviewed Cessna Single Engine Service Kit SK172-147, dated December 29, 1995. This service kit provides instructions to add a channel to each forward cabin doorpost bulkhead. The FAA also reviewed Cessna Single Engine Service Kit SK182-115, dated December 29, 1995; Cessna Single Engine Service Kit SK206-42D, dated May 29, 2019; and Cessna Single Engine Service Kit SK210-156, dated

December 29, 1995. For the applicable model airplanes, these service kits provide instructions to add a doubler and a channel to each forward cabin doorpost bulkhead. In addition, the FAA reviewed Cessna Single Engine Service Kit SK207-19A, dated May 29, 2019. The service information contains procedures to reinforce the lower forward doorpost bulkhead and wing strut fitting by adding a doubler and a channel to each forward cabin doorpost bulkhead.

Costs of Compliance

The FAA estimates that this AD affects 14,653 airplanes of U.S. registry.

The FAA estimates the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspect the lower area of the forward cabin doorposts for cracks	1.5 work-hours X \$85 per hour = \$127.50	Not applicable	\$127.50	\$1,868,257.50
Reporting requirement	1 work-hour X \$85 per hour = \$85	Not applicable	\$85	\$1,245,505

The FAA estimates the following costs to do any necessary repairs that would be required based on the results of the inspection. Reference the applicable Cessna single engine service bulletin for kit applicability. The FAA has no way of determining the number of airplanes that might need this repair.

On-condition costs

Action	Labor cost	Parts cost	Cost per product
Install Cessna Single-Engine Service Kit SK172-147	36 work-hours X \$85 per hour = \$3,060	\$3,415	\$6,475
Install Cessna Single-Engine Service Kit SK182-115	36 work-hours X \$85 per hour = \$3,060	\$7,490	\$10,550

Action	Labor cost	Parts cost	Cost per product
Install Cessna Single-Engine Service Kit SK206-42D	36 work-hours X \$85 per hour = \$3,060	\$3,115	\$6,175
Install Cessna Single-Engine Service Kit SK207-19A	36 work-hours X \$85 per hour = \$3,060	\$4,957	\$8,017
Install Cessna Single-Engine Service Kit SK210-156	36 work-hours X \$85 per hour = \$3,060	\$7,020	\$10,080

Paperwork Reduction Act

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB control number. The control number for the collection of information required by this AD is 2120-0056. Public reporting for this collection of information is estimated to be approximately 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Parkway, Fort Worth, TX 76177-1524.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator.

Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2020-18-01 Textron Aviation Inc.: Amendment 39-21222; Docket No. FAA 2018-0049; Product Identifier 2017-CE-031-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to the following Textron Aviation Inc. (type certificate previously held by Cessna Aircraft Company) model airplanes, certificated in any category:

Table 1 to paragraph (c) of this AD – Affected Models and Serial Numbers

Model	Serial Numbers
172N	17272885 through 17274009 inclusive
172P	All serial numbers
172Q	17275869, 17275927 through 17275934 inclusive, 17275952, 17275959, 17275960, 17275962, 17275964, 17275965, 17275967, 17275968, 17275969, 17275971, 17275992, 17275999, 17276002, 17276005, 17276029, 17276032, 17276042, 17276045, 17276051, 17276052, 17276054, 17276101, 17276109, 17276140, 17276147, 17276188, and 17276211
172RG	All serial numbers
F172N	F17201910 through F17202039 inclusive
F172P	All serial numbers
FR172K	FR17200656 through FR17200675 inclusive
R172K	R1723200 through R1723454 inclusive
182E	All serial numbers
182F	All serial numbers
182G	All serial numbers
182H	All serial numbers
182J	All serial numbers
182K	All serial numbers
182L	All serial numbers
182M	All serial numbers
182N	All serial numbers
182P	All serial numbers
182Q	All serial numbers
182R	All serial numbers
T182	All serial numbers
F182P	All serial numbers
F182Q	All serial numbers
FR182	All serial numbers
R182	R18200002 through R18200583 inclusive
R182 and TR182	R18200001 and R18200584 through R18202039 inclusive
206	All serial numbers
P206, P206A, P206B, P206C, P206D, P206E, TP206A, TP206B, TP206C, TP206D, and TP206E	All serial numbers

Model	Serial Numbers
U206, U206A, U206B, U206C, U206D, U206E, U206F, U206G, TU206A, TU206B, TU206C, TU206D, TU206E, TU206F, and TU206G	All serial numbers
207, 207A, T207, and T207A	All serial numbers
210-5 (205)	All serial numbers
210-5A (205A)	All serial numbers
210B	All serial numbers
210C	All serial numbers
210D	All serial numbers
210E	All serial numbers
210F	All serial numbers
T210F	All serial numbers

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 53, Fuselage.

(e) Unsafe Condition

This AD was prompted by a report of cracks found in the lower area of the forward cabin doorpost bulkhead. The FAA is issuing this AD to detect and address cracking of the wing strut attach point. The unsafe condition, if not addressed, could result in failure of the wing in operation, which could result in loss of control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Initial Inspections

(1) For airplanes without a lower forward doorpost bulkhead and wing strut fitting reinforcement service kit (service kit) installed in accordance with Cessna Single Engine Service Bulletin SEB95-19, dated December 29, 1995 (SEB95-19), or Cessna Single

Engine Service Bulletin SEB93-5, Revision 2, dated May 29, 2019 (SEB93-5R2): At the applicable compliance time specified in paragraph (g)(1)(i) or (ii) of this AD, do a visual inspection of the lower forward doorpost at the strut attach fitting for cracks in accordance with steps 1.A., 1.B., 1.C., and 1.B. (the step following step 1.C.) of the Accomplishment Instructions in SEB95-19; or steps 1.A. and 1.B. of the Accomplishment Instructions in SEB93-5R2; as applicable to your model airplane.

(i) For airplanes that have accumulated less than 4,000 hours time-in-service (TIS) as of the effective date of this AD: Initially inspect prior to the accumulation of 4,000 hours TIS or within the next 200 hours TIS after the effective date of this AD, whichever occurs later.

(ii) For airplanes that have accumulated 4,000 or more hours TIS as of the effective date of this AD: Initially inspect within 200 hours TIS after the effective date of this AD or within 12 calendar months after the effective date of this AD, whichever occurs first.

(2) For airplanes with a service kit installed in accordance with SEB95-19 or SEB93-5R2: At the later of the times specified in paragraphs (g)(2)(i) and (ii) of this AD, do a visual inspection of the lower forward doorpost at the strut attach fitting for cracks in accordance with steps 1.A., 1.B., 1.C., and 1.B. (the step following step 1.C.) of the Accomplishment Instructions in SEB95-19; or steps 1.A. and 1.B. of the Accomplishment Instructions in SEB93-5R2; as applicable to your model airplane. Do not remove the installed service kit; instead, inspect for cracking that extends beyond the modified parts.

(i) At the applicable time specified in paragraph (g)(1)(i) or (ii) of this AD.

(ii) Within 1,000 hours TIS or 36 calendar months, whichever occurs first, since installing the service kit.

(h) Repetitive Inspections

(1) If no cracks are found during the initial inspection required by paragraph (g)(1) or (2) of this AD, thereafter repeat the inspection at intervals not to exceed 36 calendar months or 1,000 hours TIS, whichever occurs first from the last inspection, as long as no cracks are found.

(2) If cracks are found during any inspection required by paragraph (g)(1) or (h)(1) of this AD, do the inspection specified in paragraph (g)(2) of this AD within 36 calendar months or 1,000 hours TIS, whichever occurs first after installing the service kit required by paragraph (i)(1) of this AD. Thereafter, repeat the inspection at intervals not to exceed 36 calendar months or 1,000 hours TIS, whichever occurs first from the last inspection, as long as no additional cracks are found.

(i) Corrective Actions

(1) If cracks are found during any inspection required by paragraph (g)(1) or paragraph (h)(1) of this AD, before further flight, install a service kit in accordance with step 1.D. of the Accomplishment Instructions in SEB95-19; or step 1.C. of the Accomplishment Instructions in SEB93-5R2; as applicable to your model airplane.

(2) If cracks are found during any inspection required by paragraph (g)(2) or (h)(2) of this AD, before further flight, repair the area using a method approved by the Manager, Wichita ACO Branch, FAA. For a repair method to be approved by the Manager, Wichita ACO Branch as required by this paragraph, the Manager's approval

letter must specifically refer to this AD. You may use the contact information in paragraph (n)(1) of this AD to obtain FAA approval of your repair method.

(j) Reporting Requirement

Within 30 days after the effective date of this AD, or within 30 days after completing the initial inspection required by paragraph (g) of this AD, whichever occurs later, report the findings of the initial inspection (regardless if cracks were found or not) to the FAA at Wichita-COS@faa.gov. Thereafter, within 30 days after completing each repetitive inspection required by paragraph (h) of this AD, if any crack was found, report the crack findings to the FAA at Wichita-COS@faa.gov. Include in your reports the following information:

- (1) Name and address of the owner;
- (2) Date of the inspection;
- (3) Name, address, telephone number, and email address of the person submitting the report;
- (4) Airplane serial number and total hours TIS on the airplane at the time of the inspection; and
- (5) If any crack was found during the inspection, provide detailed crack information as specified below:
 - (i) A sketch or picture detailing the crack location;
 - (ii) Measured length of the crack(s) found;
 - (iii) Installation of a Cessna service kit or any other kit or repair before the inspection; and

(iv) Installation of any supplemental type certificates (STCs), alterations, repairs, or field approvals affecting the area of concern or affecting gross weight.

(k) Credit for Previous Actions

(1) You may take credit for the initial inspection required by paragraph (g) of this AD if you performed the inspection before the effective date of this AD using Cessna Single Engine Service Bulletin SEB93-5, dated March 26, 1993; or Cessna Single Engine Service Bulletin SEB93-5, Revision 1, dated September 8, 1995.

(2) You may take credit for the installation required by paragraph (i)(1) of this AD as follows.

(i) For Model 207, T207, 207A, and T207A airplanes with a service kit installed using SK206-42, SK206-42A, SK206-42B, or SK206-42C: You may take credit for the installation if done before the effective date of this AD using Cessna Single Engine Service Bulletin SEB93-5, dated March 26, 1993, or Cessna Single Engine Service Bulletin SEB93-5, Revision 1, dated September 8, 1995; if the reinforcement of the lower forward doorpost bulkhead and wing strut fitting specified in Cessna Single Engine Service Kit SK207-19A, dated May 29, 2019, is also accomplished within 200 hours TIS after the effective date of this AD.

(ii) For all other models: You may take credit for the installation if done before the effective date of this AD using Cessna Single Engine Service Bulletin SEB93-5, dated March 26, 1993; or Cessna Single Engine Service Bulletin SEB93-5, Revision 1, dated September 8, 1995.

(l) Paperwork Reduction Act Burden Statement

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 1 hour per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW, Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

(m) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Wichita ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (n)(1) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(n) Related Information

(1) For more information about this AD, contact Bobbie Kroetch, Aerospace Engineer, Wichita ACO Branch, 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: (316) 946-4155; fax: (316) 946-4107; email: bobbie.kroetch@faa.gov or Wichita-COS@faa.gov.

(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (o)(3) and (4) of this AD.

(o) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Cessna Single Engine Service Bulletin SEB93-5, Revision 2, dated May 29, 2019.

(ii) Cessna Single Engine Service Bulletin SEB95-19, dated December 29, 1995.

(3) For service information identified in this AD, contact Textron Aviation Inc., Textron Aviation Customer Service, One Cessna Blvd., Wichita, Kansas 67215; telephone: (316) 517-5800; email: customercare@txtav.com; internet: <https://support.cessna.com>.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fedreg.legal@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on August 24, 2020.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2020-22039 Filed: 10/6/2020 8:45 am; Publication Date: 10/7/2020]